

REMARKS

By this amendment, claims 1-39 are pending, in which no claim is canceled, withdrawn, currently amended, or newly presented.

The final Office Action mailed October 6, 2004 rejected claims 1-39 under 35 U.S.C. § 102 as anticipated by *Zheng et al.* (US 5,392,280).

Applicants respectfully traverse the outstanding rejection on the merits, because in Applicants' view the claimed invention patentably defines over the applied art, as next discussed.

First, Applicants acknowledge with appreciation the courtesy of a telephonic interview granted to Applicants' representative, Mr. Keth Dittavong (Reg. No. 44658), on Jan. 4, 2005 at which time the subject invention was explained in light of Applicants' disclosure, the outstanding issues were discussed, and arguments substantially as hereinafter developed were presented. During the interview, Applicants' representative explained that *Zheng et al.* discloses a Connection Lookup Table 216 that stores addresses of the first and last cells of cell queues, and thus provides positioning on the **cells** within a particular cell queue, but NOT on the relative positions of the **queues**. It was also explained that *Zheng et al.* Further, Applicants' representative noted, with respect to claim 2, that the Examiner's rationale that disclosure of a "digital communication system" necessarily discloses a "satellite communication system" is without any legal basis. No formal agreement was reached, pending the Examiner's detailed reconsideration of the application upon formal submission of a response to the outstanding Office Action.

Independent claims 1 and 29 recite "retrieving a search order table having a plurality of table entries corresponding to *M* queues that selectively store the packets, **the table entries storing values that correspond to relative positions of the *M* queues** and that are selected based upon a transmission constraint of the communication system." Independent claim 11 recites "a memory storing a search order table having a plurality of table entries corresponding to the *M* queues, **the table**

entries storing values that correspond to relative positions of the M queues and that are selected based upon a transmission constraint of the communication system.” Independent claim 21 recites “a memory storing a search order table having a plurality of table entries, **the table entries storing values that correspond to relative positions of the plurality of queues** and that are selected based upon a transmission constraint, wherein the number of queues is M .” Claim 39 recites “scheduling transmission of the packets stored in a plurality of queues based upon a search order table, wherein the search order table has a plurality of table entries corresponding to the queues, **the table entries storing values that correspond to relative positions of the queues.**”

The Examiner now cites to col. 14: 31-33 of *Zheng et al.* for a supposed disclosure of the above features with respect to *Zheng et al.*’s use of a Connection Lookup Table (CLT). On page 6 of the Office Action, the Examiner contends that “Zheng also discloses “the addresses of the first [sic] and last cells of queues are stored in the CLT ... (i.e. storing values that correspond to relative positions of the M queues).” As pointed out during the telephonic interview, the first address and the last address pertain to the **positions of the cells** within a particular queue. In FIG. 16, the shared buffer memory (which follows a linked-list queuing structure) stores tags, which point to the location of the next **cell** in a particular queue (col. 14: 25-36). FIG. 16 shows the cell queue that corresponds to connection 1, whereby the first cell address (FCA) belongs to Cell 0, and the last cell address (CLA) belongs to Cell n .

A thorough study of the Connection Lookup Table (CLT) reveals that there are n connections, and thus, n cell queues maintained by the shared buffer memory, which stores a tag for each cell to point to the next cell within a specific cell queue. The CLT does not provide any field that conveys the position of these n cell queues. Therefore, the claimed feature of “values that correspond to the **relative positions of the M queues**” cannot be taught or otherwise suggested by *Zheng et al.*

Anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference. Based on the foregoing, it is clear that *Zheng et al.* fails to anticipate independent claims 1, 11, 21, 29, and 39.


Because claims 2-10, 12-20, 22-28, and 30-38 depend correspondingly from independent claims 1, 11, 21, and 29, they are also in condition for allowance for at least the reasons for the allowability of these independent claims. Furthermore, the dependent claims are also separately patentable on their own merits.

For example, dependent claim 2 recites “wherein the transmission constraint in the retrieving step specifies that the packets are to be transmitted to a **plurality of destination nodes that are non-interfering, the communication system being a satellite communication system.**” The Office Action, on page 5, asserts that “the Zheng reference does anticipate a ‘satellite’ communication system through the term ‘digital communication system.’” Applicants do not understand the legal basis for this reasoning, which appears to suggest that a disclosure of a genus necessarily discloses all possible species. This contention lacks grounding in established law. Consequently, Applicants respectfully request withdrawal of the rejection.

As regard independent claim 39, this independent claim is further allowable in that the claim is drawn to “a method of forwarding packets via a **satellite** to a plurality of nodes” and recites “transmitting the packets to the nodes over one or more **satellite links.**” The Office Action, on page 9, simply ignores the claim language of “satellite” in rejecting this claim.

Therefore, the present application, as amended, overcomes the rejection of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (301) 601-7252 so that such issues may be resolved as expeditiously as possible.

Respectfully submitted,



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